

JOINT DECLARATION AND POWER OF ATTORNEY

ORIGINAL APPLICATION

As below named inventors, we hereby declare that:

Our residence, post office address and citizenship are as stated below next to our names.

We believe we are the original and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled:

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the specification of which is being filed herewith.

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

We hereby appoint the following attorney(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Charles B. Lyon
Reg. No. 25,739

John T. Wiedemann
Reg. No. 28,920

June E. Rickey
Reg. No. 40,144

John E. Miller
Reg. No. 26,206

Jeanne E. Longmuir
Reg. No. 33,133

Sean T. Moorhead
Reg. No. 38,564

Mary E. Golrick
Reg. No. 34,829

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Pamela A. Docherty
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S. Paige Christopher
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Ronald D. Gutt
Reg. No. P43,650

Petar Kraguljac
Reg. No. 38,520

Eileen T. Mathews
Reg. No. 41,973

Leonard L. Lewis
Reg. No. 31,176

John S. Cipolla
Reg. No. 37,597

Please send all future correspondence in connection with this application and any patent issuing thereon to the following address:

Mr. John E. Miller
Calfee, Halter & Griswold
1400 McDonald Investment Center
800 Superior Avenue
Cleveland, Ohio 44114-2688
(216) 622-8679

We hereby declare that all statements made hereon of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of First
Joint Inventor

Amitava Guha

Inventor's
Signature

Amitava Guha

August 30, 1999

Date

Residence:

519 Thackeray Trail
Richmond Hts., Ohio 44143

Citizenship:

U.S.A.

Post Office
Address:

519 Thackeray Trail
Richmond Hts., Ohio 44143

Full name of Second
Joint Inventor

William D. Nielsen, Jr.

Inventor's
Signature

William D. Nielsen

Aug 30, 1999
Date

Residence:

87 Highland
Avon Lake, Ohio 44012

Citizenship:

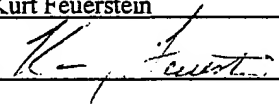
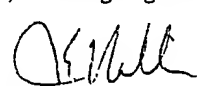
U.S.A.

Post Office
Address:

87 Highland
Avon Lake, Ohio 44012

RECORDATION FORM COVER SHEET
PATENTS ONLY

To the Assistant Commissioner for Patents. Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies): Amitava Guha and William D. Nielsen, Jr.</p> <p>Additional names of conveying party(ies) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p> <hr/>	<p>2. Name and address of receiving party(ies): Name: Brush Wellman, Inc. Internal Address: Street Address: 17876 St. Clair Avenue City: Cleveland State: Ohio Zip: 44110</p> <p>Additional name(s) & address(es) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p>
<p>3. Nature of Conveyance</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other</p> <p>Execution Date: August 30, 1999</p>	
<p>4. Application number(s) or patent number(s):</p> <p>If this document is being filed together with a new application, the execution date of the application is <u>September 1, 1999</u>.</p> <p>A. Patent Application No(s). B. Patent No(s).</p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>John E. Miller Calfee, Halter & Griswold LLP 1400 McDonald Investment Center 800 Superior Avenue Cleveland, Ohio 44114-2688</p> <hr/> <p><u>CERTIFICATE OF MAILING</u></p> <p>I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" Label No. US085008342US addressed to Box Patent Application, Assistant Commissioner for Patents, Washington, D.C. 20231, on this 1st day of September, 1999.</p> <p>Name: <u>Kurt Feuerstein</u></p> <p>Signature: <u></u></p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <hr/> <p>7. Total fee (37 CFR 3.41): <u>\$ 40.00</u></p> <p><input checked="" type="checkbox"/> Enclosed</p> <p><input checked="" type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Total fee due <input checked="" type="checkbox"/> Any deficiencies in the enclosed fees</p> <hr/> <p>8. Deposit account number: 03-0172</p> <hr/> <p>(Attach duplicate copy of this page if paying by deposit account)</p>
<p>DO NOT USE THIS SPACE</p>	
<p>9. Statement and signature To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</p> <p>John E. Miller Name of Person Signing Reg. No. 26,206 Tel: 216 622-8679</p> <p><u></u> Signature</p> <p><u>9/1/99</u> Date</p> <p>Total number of pages comprising transmittal: <u>1</u></p>	

ASSIGNMENT

For One Dollar (\$1.00) and other good and valuable consideration received of the hereinafter named assignee, receipt of which is hereby acknowledged, we, the undersigned, Amitava Guha, 519 Thackeray Trail, Richmond Hts., County of Cuyahoga of the State of Ohio; and William D. Nielsen, Jr., 87 Highland, Avon Lake, County of Lorain of the State of Ohio, hereby assign all right, title and interest to Brush Wellman, Inc., an Ohio corporation, having a place of business at 17876 St. Clair Avenue, Cleveland, Ohio 44110, its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions in

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set forth in the application for United States Letters Patent executed by the undersigned on even date, said application for United States Letters Patent, any and all other applications for Letters Patent on said inventions in countries foreign to the United States, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patents and reissues and extension of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent; said assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said assignee or otherwise as said assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents of the United States of America and the empowered officials of all other governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, and that the undersigned will do all acts reasonably serving to assure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and in substance which may be requested by said assignee, to furnish said assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and the testify in any proceedings relating to said inventions, patent applications and Letters Patent.

Date: 8-30-99

Amitava Guha

Amitava Guha

State of Ohio)
) SS:
County of Cuyahoga)

On this 30th day of August, 1999, personally appeared before me, Amitava Guha, to me known to be the person named in and who executed the above instrument, and acknowledged to me that they executed the same for the uses and the purposes therein mentioned.

[SEAL]

Susan M. Zacher
Notary Public

Susan M. Zacher
Notary Public State of Ohio
My Commission Expires Jan 24, 2004
Recorded in Lake County

Date: 8-30-99

William D. Nielsen

William D. Nielsen, Jr.

State of Ohio)
) SS:
County of Cuyahoga)

On this 30th day of August, 1999, personally appeared before me, William Nielsen, to me known to be the person named in and who executed the above instrument, and acknowledged to me that they executed the same for the uses and the purposes therein mentioned.

[SEAL]

Susan M. Zacher
Notary Public

Susan M. Zacher
Notary Public State of Ohio
My Commission Expires Jan 24, 2004
Recorded in Lake County



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

NOVEMBER 09, 1999

PTAS

CALFEE, HALTER & GRISWOLD LLP
JOHN E. MILLER
1400 MCDONALD INVESTMENT CENTER
800 SUPERIOR AVENUE
CLEVELAND, OHIO 44114-2688



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UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 09/01/1999

REEL/FRAME: 010218/0273
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

GUHA, AMITAVA

DOC DATE: 08/30/1999

ASSIGNOR:

NIELSEN, WILLIAM D., JR.

DOC DATE: 08/30/1999

ASSIGNEE:

BRUSH WELLMAN, INC.
17876 ST. CLAIR AVENUE
CLEVELAND, OHIO 44110

SERIAL NUMBER: 09387894

FILING DATE: 09/01/1999

PATENT NUMBER:

ISSUE DATE:

SONYA JOHNSON, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

DOCKETED

NOV 22 1999

L.P. Dept

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NOV 22 1999

09-10-1999

9.1.99



101140339

To the Assistant Commissioner for Patents.

or copy thereof.

1099 U.S. PTO
09/30/99
09/10/99

<p>1. Name of conveying party(ies): Amitava Guha and William D. Nielsen, Jr.</p> <p>Additional names of conveying party(ies) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p>		<p>2. Name and address of receiving party(ies): Name: Brush Wellman, Inc. Internal Address: Street Address: 17876 St. Clair Avenue City: Cleveland State: Ohio Zip: 44110</p> <p>Additional name(s) & address(es) attached? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p>	
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<p>CERTIFICATE OF MAILING</p> <p>I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" Label No. <u>US085008342US</u> addressed to Box Patent Application, Assistant Commissioner for Patents, Washington, D.C. 20231, on this 1st day of September, 1999.</p> <p>Name: <u>Kurt Feuerstein</u></p> <p>Signature: <u>[Signature]</u></p>			

DO NOT USE THIS SPACE

9. Statement and signature
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

John E. Miller
Name of Person Signing
Reg. No. 26,206 Tel: 216 622-8679

[Signature]
Signature

9/1/99
Date

Total number of pages comprising transmittal: 1

09/10/1999 DNGUYEN 00000057 09387894

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ASSIGNMENT

For One Dollar (\$1.00) and other good and valuable consideration received of the hereinafter named assignee, receipt of which is hereby acknowledged, we, the undersigned, Amitava Guha, 519 Thackeray Trail, Richmond Hts., County of Cuyahoga of the State of Ohio; and William D. Nielsen, Jr., 87 Highland, Avon Lake, County of Lorain of the State of Ohio, hereby assign all right, title and interest to Brush Wellman, Inc., an Ohio corporation, having a place of business at 17876 St. Clair Avenue, Cleveland, Ohio 44110, its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions in

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set forth in the application for United States Letters Patent executed by the undersigned on even date, said application for United States Letters Patent, any and all other applications for Letters Patent on said inventions in countries foreign to the United States, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patents and reissues and extension of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent; said assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said assignee or otherwise as said assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents of the United States of America and the empowered officials of all other governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, and that the undersigned will do all acts reasonably serving to assure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and in substance which may be requested by said assignee, to furnish said assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and the testify in any proceedings relating to said inventions, patent applications and Letters Patent.

Date: 8-30-99

Amitava Guha

Amitava Guha

State of Ohio)
) SS:
County of Cuyahoga)

On this 30th day of August, 1999, personally appeared before me, Amitava Guha, to me known to be the person named in and who executed the above instrument, and acknowledged to me that they executed the same for the uses and the purposes therein mentioned.

[SEAL]

Susan M. Zacher
Notary Public

Susan M. Zacher
Notary Public State of Ohio
My Commission Expires Jan 24, 2004
Recorded in Lake County

Date: 8-30-99

William D. Nielsen

William D. Nielsen, Jr.

State of Ohio)
) SS:
County of Cuyahoga)

On this 30th day of August, 1999, personally appeared before me, William Nielsen, to me known to be the person named in and who executed the above instrument, and acknowledged to me that they executed the same for the uses and the purposes therein mentioned.

[SEAL]

Susan M. Zacher
Notary Public

Susan M. Zacher
Notary Public State of Ohio
My Commission Expires Jan 24, 2004
Recorded in Lake County